



TERRY E. BRANSTAD, GOVERNOR

DEPARTMENT OF NATURAL RESOURCES

LARRY J. WILSON, DIRECTOR

June 20, 1990

Mr. James Woll
Archer-Daniels Midland Company
PO Box 340
Clinton, IA 52732

SUBJECT:	<u>Boiler No.</u>	<u>Permit No.</u>
	1	85-A-048-S90
	2	85-A-048-S90
	3	85-A-048-S90
	4	82-A-095-S90
	5	82-A-095-S90
	6	72-A-111-S90
	7	72-A-112-S90
	8	90-A-067
	9	86-A-031-S90

Dear Mr. Woll:

In accordance with provisions specified in subrule 567--22.3(5) of the Iowa Administrative Code this letter represents supplements to permits 72-A-111, 72-A-112, 82-A-095 and 85-A-048. These permits are in regard to steam generation units 1 through 9 at the Clinton operations of Archer-Daniels Midland Company.

Condition 1 -- Allowable Emission Rates

Boilers 1, 2, 3, 4 and 5

The maximum emission rate as determined by means of a twenty-four hour rolling average of continuous monitoring results shall not exceed 2.00 pounds of sulfur dioxide per million Btu of heat input.

Boiler 6 and 7

The average maximum emission rate as determined by means of a twenty-four hour rolling average of continuous monitoring results shall not exceed 3.00 pounds of sulfur dioxide per million Btu of heat input.

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Boilers 8 and 9

These boilers shall only be operated on natural gas unless and until ADM provides a demonstration assuring continued maintenance of the ambient air quality standard while firing these boilers with fuel oil.

Condition 2 -- Continuous Emissions Monitoring Equipment

The permittee shall install, calibrate, maintain, and operate a continuous emission monitoring (CEM) system to measure emissions of SO₂ from Boilers 6 and 7. The permittee shall install, calibrate, operate and maintain a continuous emission monitoring system to measure emissions of sulfur dioxide from boiler #1 through #5 prior to any commingling of emissions from these boilers with the emissions from boilers #6 or #7. Each continuous sulfur dioxide emission monitoring system shall include an oxygen (or carbon dioxide) emission monitor.

Installation shall be completed by July 1, 1991, with a certification report submitted to the Department no later than September 1, 1991.

Compliance with the sulfur dioxide emission limit of this permit shall be continuously demonstrated by the permittee through the use of the CEM system.

Condition 3 -- Installation, Evaluation and Operation of the Continuous Emission Monitoring Systems

Each procedure under 40 C.F.R. 60.13 shall be followed for installation, evaluation and operation of the CEM systems.

- a. Each continuous monitoring system shall be certified in accordance with procedures under Performance Specifications 2 and 3 of 40 C.F.R. Part 60, Appendix B.
- b. Quarterly accuracy determinations and daily calibration drift tests shall be performed in accordance with Procedure 1 of 40 C.F.R. Part 60, Appendix F.
- c. The span value of the CEM shall be 200 percent of the maximum estimated hourly potential sulfur dioxide emissions from the fuel combusted.

Condition 4 -- Record Keeping

The permittee shall maintain the following records in a manner suitable for inspection at the Clinton facility for a period of at least two years from the date of record. The permittee shall make such records available to the Department upon request:

- a. The one-hour average sulfur dioxide emission rates measured by the CEM required by this permit.
- b. Identification of the operating days for which sulfur dioxide emission data have not been obtained, including reasons for not obtaining sufficient data and a description of corrective actions taken.
- c. Identification of the times when emission data have been excluded from the calculation of average emission rates and the reasons for excluding the data.
- d. Identification of the times when the sulfur dioxide concentration exceeded the full span of the continuous monitoring system.
- e. Description of any modifications or maintenance made to the continuous monitoring system that could affect the ability of the CEM to comply with 40 C.F.R. Part 60, Appendix B, Performance Specifications 2 and 3.
- f. Results of the daily continuous monitoring system drift tests and quarterly accuracy assessments conducted in accordance with 40 C.F.R. Part 60, Appendix F.

Condition 5 -- Excess Emissions

An incident of excess emissions of sulfur dioxide shall be reported to the Department of Natural Resources in accordance with Chapter 24 of the rules. An incident of excess emission is defined as a period during which the average emission rate for sulfur dioxide, as measured by the CEM, exceeds the maximum twenty-four hour allowable emission rate.

Condition 6 -- Reporting Requirements

The following operation, emissions and control reporting requirements of this condition shall begin the calendar quarter in which the CEM becomes operational, covering the entire quarter or portion thereof. This information shall be reported on the forms supplied by the Department.

- a. The magnitude of excess emissions computed in accordance with Condition 4a, any conversion factor(s) used, and the date and time of commencement and completion of each time period of excess emission.

- b. Specific identification of each period of excess emissions that occurs during startups and shutdowns of the affected facility. The nature and cause of any excess emission and the corrective action taken shall be reported.
- c. The date and time identifying each period during which the CEM was inoperative except for zero and span checks and the nature of the system repairs or adjustments.
- d. When no excess emissions have occurred or the CEM has not been inoperative, repaired, or adjusted, such information shall be stated in the report.
- e. The results of the quarterly accuracy assessments as required by 40 C.F.R. Part 60, Appendix F.

Condition 7 -- Notification Requirements

Notification of the schedule for the relative accuracy determination required in Performance Specification 2 shall be provided to the Department in writing not later than fifteen (15) days before the test is performed. Such notice shall include, at a minimum, the time, the place and the name of the person who will conduct the test. Unless specifically waived by the Department, a pretest meeting shall be held no later than fifteen (15) days prior to conducting the compliance demonstration. A representative of the Department shall be permitted to witness the tests.

Condition 8 -- Construction of New Stack

ADM shall construct a new stack not less than 300 feet in height located approximately at UTM coordinate 731,706 meters Easterly by 4,633,416 meters Northerly and shall relocate all emissions from Boilers #1 through #7 to this stack pursuant to the schedule noted below:

Item	To be completed no later than:
Submit final design drawings	September 1, 1990
Start stack construction	November 1, 1990
Complete stack construction	May 1, 1991
Start boiler upgrade and duct construction	May 1, 1991
Complete boiler upgrade and duct construction	July 1, 1991
Submit report Demonstrating Compliance with emission limits	September 1, 1991

Immediately upon completion of upgrading and duct construction of each boiler ADM shall cease emissions from the existing stacks for boilers 1 through 7.

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During this construction period, ADM shall report the status of construction to DNR in writing by the first of each month.

All other conditions of these permits shall remain the same.

Sincerely,

Michael Hayward

MICHAEL HAYWARD

AIR QUALITY SECTION

AIR QUALITY AND SOLID WASTE PROTECTION BUREAU

MH:dkr

A:HAYWARD.26

cc: Field Office 6